OKEANOS EXPLORER ROV DIVE SUMMARY

Site Name	Off-axis sulfide mounds		EX 1103 GALREX - SITES OF INTEREST SECOND SEC		
ROV Lead/ Expedition Coordinator General Area Descriptor	Dave Lovalvo/ Jeremy Potter X km NX of x Island, Galapagos Islands		Tours to the state of the state		
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ROV Dive Name	Cruise Season EX1103	Leg 2		Dive Number DIVE09	
	ROV:	Little Hercules		Hercules	
Equipment Deployed	Camera Platfom:	Seirios			
ROV Measurements	□ CTD □ Scanning Sonar	Depth USBL Position	Altitude		
	Scanning Sonar Pitch	Roll		✓ Heading✓ HD Camera	
	Low Res Cam 1	Low Res Cam 2			
Equipment Malfunctions	None				
ROV Dive Summary (From processed ROV data)	00°, Out Water at: 201: 00°, Off Bottom at: 201: 00°, On Bottom at: 201: 00°, Dive duration: 7:41 Bottom Time: 3:42	1-07-24T14:18:15.439000 35.824' N; 086°, 05.761' \\ 1-07-24T21:59:51.537000 35.734' N; 086°, 05.871' \\ 1-07-24T20:06:38.275000 35.812' N; 086°, 05.891' \\ 1-07-24T16:24:36.362000 35.696' N; 086°, 05.737' \\ ::36	N N		
Special Notes	Click here to enter text.				
Scientists Involved (please provide name / location / affiliation / email)	Timothy M. Shank/ Okeanos Explorer Lead Scientist/WHOI/tshank@whoi.edu Edward T. Baker/NOAA-PMEL, Washington/Edward.baker@noaa.gov Robert W. Embley/NOAA-PMEL, Oregon/Robert.w.embley@noaa.gov Stephen Hammond/ NOAA-PMEL, Oregon/Stephen.r.hammond@noaa.gov James F. Holden/ UMASS Amherst/jholden@microbio.umass.edu Scott White/University of South Carolina/swhite@geol.sc.edu Sharon L. Walker/ NOAA-PMEL, Washington/sharon.l.walker@noaa.gov Santiago Herrera/ WHOI Exploration Command Center/WHOI/sherrera@whoi.edu T. Jennifer Lin/UMASS Amherst/tjennlin@gmail.com Catriona Munro/ WHOI Exploration Command Center /WHOI/catmunro89 @gmail.com				

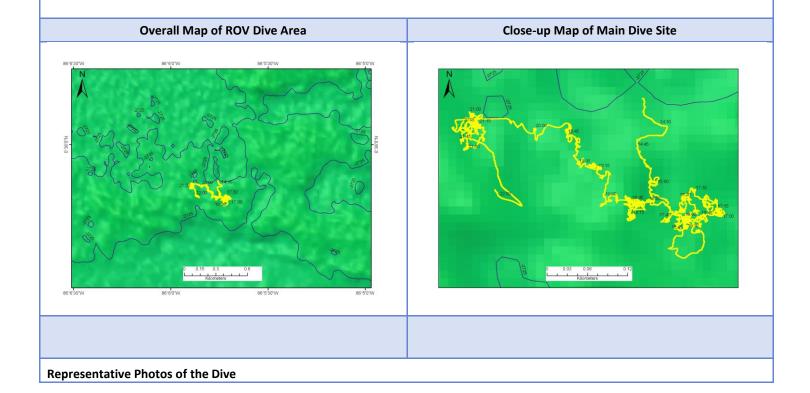
Taylor Heyl/ WHOI Exploration Command Center/WHOI/theyl@whoi.edu Lucy C. Stewart/ UMASS Amherst/Isteweart@cns.umass.edu Mashkoor Malik/ NOAA Office of Ocean Exploration & Research/mashkoor.malik@noaa.gov Meme Lobecker/ NOAA Office of Ocean Exploration & Research/ Elizabeth.Lobecker@noaa.gov

Purpose of the Dive

To locate and explore the Off-Axis Sulfide Mounds.

Description of the Dive:

Little Hercules surveyed a gently sloping mound with corals, sponges, holothurians and imaged yellow mineral deposits in sediments before continuing to the NE to the next cluster of sulfide mounds. ROV then headed west to follow a line of sonar targets and found mounds with similar faunal composition and more yellow staining around cracks/orifices at the base of rocky outcrops. Sponges were abundant at the top of the mound. Little Hercules explored to the west and traversed over a mound similar to ones seen previously with fractured crust and Mn staining, before turning North. Here, Little Hercules imaged on old clam shell that appeared to be ~8 cm in length with no trail marks nearby. The surrounding sediment was platy and meter-high mounds were observed with no staining or sulfide.



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Please direct inquiries to:	NOAA Office of Ocean Exploration & Research 1315 East-West Highway (SSMC3 10 th Floor) Silver Spring, MD 20910 (301) 734-1014		